

Before the  
**Federal Communications Commission**  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

Allocation of Spectrum Below )  
5 GHz Transferred from )  
Federal Government Use )

ET Docket No. 94-32

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**COMMENTS OF THE RADIO AMATEUR SATELLITE CORPORATION  
IN RESPONSE TO THE COMMISSION'S SECOND NOTICE OF PROPOSED  
RULE MAKING**

March 20, 1995

**SUMMARY**

AMSAT supports the comments of the American Radio Relay League that no additional Amateur Service rules are necessary with respect to operation with asynchronous PCS devices in the 2390-2400 MHz segment. In addition, we have suggestions based, in part, on information recently received that NTIA has released 2400-2402 MHz and 2417-2450 MHz from Government to private use. On the basis of this new information, AMSAT urges the Commission to provide the same kind of Primary amateur and amateur-satellite allocation in the 2400-2402 MHz and 2417-2450 MHz segments as it did for the 2402-2417 MHz segment. Further, AMSAT supports Apple Computer's recommendation that the amateur service be granted Primary status up to 2483.5 MHz.

AMSAT urges not combining the Part 15 allocation above 2400 MHz with the asynchronous PCS systems being given access to 2390-2400 MHz. AMSAT also urges that the Commission establish a guard band between the asynchronous PCS system band and the existing Part 15 band and that no new type of Part 15 service be established in this band.

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IN RESPONSE TO THE COMMISSION'S SECOND NOTICE OF PROPOSED  
RULE MAKING**

The Radio Amateur Satellite Corporation (AMSAT) respectfully submits these comments in response to the Commission's Second Notice of Proposed Rule Making, ET Docket No. 94-32, released February 17, 1995 (the "Second Notice").

1. AMSAT, a not-for-profit District of Columbia corporation established in 1969, is the principal membership organization of the amateur-satellite community in North America, with a current paid membership of about 7,500. Together with over 30 of our affiliated organizations throughout the world, AMSAT has constructed, launched and operated over two dozen satellites to date in the amateur-satellite service, of which the majority are presently in operation.

2. Additional satellites for the amateur-satellite service are planned or are presently under construction by AMSAT groups in several countries. The next of these, built in Mexico and Israel, are due to be launched March 28, 1995 on a Russian launch vehicle. AMSAT itself is currently working with amateur satellite construction groups in nearly a dozen countries to build the fourth and most advanced in a series of elliptical orbit amateur

satellites called "Phase 3D", which will utilize the 2400-2450 MHz band for one of its principal downlinks. It is also expected to have two uplinks in this band.

3. AMSAT commends the Commission for its action on this Docket so far. We believe that the Commission's actions are consistent with the best use of this portion of the spectrum.

4. Our suggestions will emphasize the 2400-2450 MHz band as it is the only portion of this amateur allocation available to the Amateur Satellite Service. However, we support the comments of the American Radio Relay League (ARRL) with respect to the 2390-2400 MHz segment. Our suggestions are based, in part, on information recently received that NTIA has released its final notice on the transfer of spectrum below 5 GHz from Government to private use, and that in it they designate 2400-2402 MHz and 2417-2450 MHz for transfer, in addition to the spectrum previously designated. Since this action took place after the Commission's Second Notice was released, it is understood why no mention of these additional segments was made in that notice. On the basis of this new information, AMSAT urges the Commission to provide the same kind of Primary amateur and amateur-satellite allocation in the 2400-2402 MHz and 2417-2450 MHz segments as it did for the 2402-2417 MHz segment. Further, AMSAT supports Apple Computer's recommendation in its comments filed earlier in this Docket, that the amateur service be granted Primary status up to 2483.5 MHz.

5. In response to the Commission's question regarding combining the Part 15 allocation above 2400 MHz with the asynchronous PCS systems being given access to 2390-

2400 MHz, AMSAT urges that this not be done. The type of devices being given access to 2390-2400 MHz are, by the Commission's proposed rules, very different from the Part 15 devices which have had access to 2400-2483.5 MHz. AMSAT contends that the two should be kept separate. Combining these two kinds of services would encourage the manufacturers of Part 15 devices to crowd as low in the band as possible to avoid interference from Part 18 devices. This could have a detrimental effect on amateur radio operations in the 2390-2400 MHz band as well as on the asynchronous PCS systems being given access to that band.

6. Additionally, since availability of 2390-2400 MHz to asynchronous data PCS devices is under rules completely different from those that apply to less regulated Part 15 devices above 2400 MHz, AMSAT urges the Commission to establish a guard band between the two. In addition to affording a degree of protection for asynchronous PCS devices, such a guard band will enhance the utility of this portion of the spectrum for amateur satellite downlinks which tend to be quite weak. AMSAT suggests a guard band of 10 MHz for all new Part 15 devices making their allocation 2410-2483.5 MHz. It is felt that this 12 percent reduction in total bandwidth would not materially affect the operation of these devices. If the Commission feels that it cannot provide a guard band of 10 MHz, AMSAT contends that as a minimum, a guard band of 2 MHz from 2400-2402 MHz should be established. It is recognized that some Part 15 devices have already been manufactured and sold which may operate in the proposed guard band. AMSAT understands that nothing can be done about this at the present time, and suggests that the Commission "grandfather" such devices, but appropriately establish the low frequency limit for any newly manufactured units.

7. In response to the Commission's specific question regarding revised rules for Part 15 devices operating between 2400 and 2483.5 MHz, AMSAT believes that current rules and standards should be maintained and that a "Part 16" service, as proposed by some participants in this proceeding, not be implemented.

8. AMSAT agrees with the ARRL in its comments filed on this Second Notice that no particular new rules need be applied to the amateur or amateur-satellite services other than appropriate changes to the Table of Allocations.

9. We hope that these comments have been helpful to the Commission in its continuing work on this proceeding.

RESPECTFULLY SUBMITTED,  
Radio Amateur Satellite Corporation  
P. O. Box 27  
Washington, D.C. 20044

By William A. Tynan  
William A. Tynan  
President

March 20, 1995

## **CERTIFICATE OF SERVICE**

**I, Perry I. Klein, a Vice-President of the Radio Amateur Satellite Corporation, hereby certify that a copy of these comments were mailed this 20th day of March 1995, via U.S. Postal Service, postage prepaid, first class, to the following:**

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**Perry I. Klein**